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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,485	06/15/2001	Jay H. Connelly	042390P11866	8135
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EXAMINER VAN HANDEL, MICHAEL P				
ART UNIT 2623				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/882,485

Applicant(s)

CONNELLY, JAY H.

Examiner

MICHAEL VAN HANDEL

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1.81.82.87.88.90-93.95-97 and 99-102 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1.81.82.87.88.90-93.95-97 and 99-102 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notices of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is responsive to an Amendment filed 3/18/2008. Claims **1, 81, 82, 87, 88, 90-93, 95-97, 99-102** are pending. Claims **1, 91, 95, 99** are amended. Claims **2-80, 83-86, 89, 94, 98, 103** are canceled.

Response to Arguments

1. Applicant's arguments regarding claims **1, 91, 95, and 99**, filed 3/18/2008, have been fully considered, but they are not persuasive.

Regarding claims **1, 91, 95, and 99**, the applicant argues that the prediction filter to update its list of recommended items is not the same as the demand table of claim 1. The examiner respectfully disagrees. The applicant specifically argues that merely updating a list of recommended items using a prediction filter does not anticipate the "demand table" and the relevant limitation of claim 1. As noted in the Office Action mailed 1/11/2008, Payton discloses a digital information system for delivering virtual on-demand information over digital transport systems by offloading a portion of the system's peak bandwidth requirements to local subscribers. A local collaborative filtering system synthesizes the preferences of all of the subscribers and then predicts those items that each subscriber might like, and therefore request. Each subscriber is provided with a local storage device for storing, during off-peak hours, those items recommended by the collaborative filtering system (see Abstract).

Payton also discloses a subscriber database 38 that stores a subscriber profile 40 for each of the subscribers. The subscriber profile 40 includes a rating vector in which the subscriber has rated each of the items he or she has previously requested. The vectors 146 have a length equal to the total number of items stored in the central distribution server 24 and each dimension of the vector corresponds to a particular item 36 and is assigned a rating 148. The empty spaces in the vector 146 represent items which have not been rated (col. 5, l. 6-10; col. 8, l. 50-58; & Fig. 6). Payton further discloses a local server 28 that includes a predictive filter 54 that sends subscriber profile information back to the central distribution server 24 (col. 6, l. 1-11). After using a requested item, the subscriber interface 58 prompts the subscriber to enter a rating. This could be done by pushing a number on a scale from 1 to 10 or by recording the use of the item as a positive vote (col. 6, l. 36-42). The back channel 30 is used to transmit the subscribers' updated profiles 40 from the subscribers back to the central distribution server 24 (col. 6, l. 51-53). In response to a periodic trigger, the local server 28 determines whether new subscriber profile data exists. If it does, the local server dials up the distribution server 24 to establish a communication channel. The prediction filter then sends the new profile back to the distribution server 24 (col. 7, l. 61-67 & col. 8, l. 1-5). The rating vectors within the profiles are then used to determine the list of recommended items 44 for the subscriber (col. 5, l. 6-20). The list of recommended items 44 contains previously viewed items that the subscriber has rated very highly, and is thus likely to request again (col. 5, l. 15-21). The examiner interprets the ratings vector to be a "demand table," as currently claimed, since content is being demanded on the basis that the user has previously viewed the content and rated it very highly. A scheduling processor 46 merges the lists 44 of recommended items to prioritize the items 36 from the most to the least frequently

recommended and places identifiers for these items in a refresh queue 47 for broadcast over the digital transport system 26 (col. 5, l. 22-26). As such, the examiner maintains that Payton meets the limitation of “a demand table,” as currently claimed.

Further regarding claims **1**, **91**, **95**, and **99**, the applicant argues that Payton does not disclose or reasonably suggest receiving a demand table in real-time or in batches, wherein the demand table is determined based on one or more of rankings of the prioritized content based on user interests, ratings of the prioritized content, and existing content at a client, wherein the demand table is created and updated at the client in response to filtering of the prioritized content based on one or more of the user interests of a current user at the client, user behavior of a previous user at the client, and content consumption at the client, wherein the demand table is received in response to a signal received at the client from a server, or the demand table is received automatically at a predetermined time. The examiner respectfully disagrees. Payton discloses a filter for determining whether an item is on the list of recommended items for the subscriber. If it is, and if the item’s priority is greater than the lowest priority item from storage, the filter routes the item for storage, where it is stored until requested by the user (col. 8, l. 26-37). As noted above in the preceding paragraph, Payton also discloses allowing a subscriber to rate these items and using these ratings to determine future content to broadcast. This meets the limitation of “wherein the demand table is determined based on one or more of rankings of the prioritized content based on user interests, ratings of the prioritized content, and existing content at a client, wherein the demand table is created and updated at the client in response to filtering of the prioritized content based on one or more user interests of a current user at the client, user behavior of a previous user at the client, and content consumption at the client,” as currently

claimed. Payton further discloses that the ratings are stored within the subscriber profile, and, in response to a periodic trigger, the local server 28 determines whether new subscriber profile data exists. If it does, the local server dials up the distribution server to establish a communication channel. The prediction filter sends the new profile back to the distribution server (col. 7, l. 61-67 & col. 8, l. 1-4). This meets the limitations of “receiving a demand table in real-time or in batches” and “wherein the demand table is received in response to a signal received at the client from a server, or the demand table is received automatically at a predetermined time,” as currently claimed. As such, the examiner maintains that Payton meets the limitation of “receiving a demand table in real-time or in batches, wherein the demand table is determined based on one or more of rankings of the prioritized content based on user interests, ratings of the prioritized content, and existing content at a client, wherein the demand table is created and updated at the client in response to filtering of the prioritized content based on one or more of the user interests of a current user at the client, user behavior of a previous user at the client, and content consumption at the client, wherein the demand table is received in response to a signal received at the client from a server, or the demand table is received automatically at a predetermined time,” as currently claimed.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1, 81, 87, 88, 90-92, 95, 96, 99-101** are rejected under 35 U.S.C. 102(b) as being anticipated by Payton.

Referring to claims **1, 88, 91, 95, 99, and 100**, Payton discloses a method/machine-readable medium/system/apparatus, comprising:

- broadcasting a content descriptor schedule to a client to indicate a future broadcasting of content descriptors (a list of recommended items can be broadcast to the user indicating items to be broadcast. A scheduling processor merges the lists to prioritize the items from the most to the least frequently recommended and places identifiers for the items in a queue for broadcast)(col. 3, l. 3-6, 9-15; col. 5, l. 12-31; col. 6, l. 26-31, 63-67; col. 7, l. 1-3; & col. 8, l. 5-10), the content descriptors including first content descriptors and second content descriptors, wherein the first content descriptors are assigned a first unique identifier (when items reach the top of the queue, they are broadcast to the local users. Since the user may select a specific received item from a menu of items, the examiner interprets each item as including a first unique content descriptor), and the second content descriptors are assigned a second unique identifier (highly-rated, previously viewed items can be included in an updated list of recommended items for the user and thus again included in the queue for broadcast. The examiner interprets the second broadcast of this item as including a second unique content identifier)(col. 5, l. 19-28), wherein the first and second content descriptors are identified by the client via the first and second unique identifier (col. 6, l. 26-31);

- broadcasting the first content descriptors to the client, the first content descriptors describing the content for broadcast (col. 3, l. 2-15; col. 5, l. 55-57; & col. 6, l. 1-9, 29-31);
- prioritizing the content in response to a feedback received from the client (col. 3, l. 13-14 & col. 5, l. 22-31, 55-57), wherein the feedback is automatically generated transparent to the client based on an amount of content consumed by the client (col. 6, l. 44-50 & col. 8, l. 38-43);
- broadcasting the second content descriptors, the second content descriptors describing the prioritized content for broadcast and broadcasting the prioritized content to the client (col. 3, l. 12-17; col. 6, l. 67; col. 7, l. 1-7, 61-65; & col. 8, l. 11-13);
- receiving a demand table in real-time or in batches, wherein the demand table is determined based on one or more of rankings of the prioritized content based on user interests, ratings of the prioritized content, and existing content at a client, wherein the demand table is created and updated at the client in response to filtering of the prioritized content based on one or more of the user interests of a current user at the client, user behavior of a previous user at the client, and content consumption at the client, wherein the demand table is received in response to a signal received at the client from a server (col. 7, l. 61-67; col. 8, l. 1-5; & Fig. 4), or the demand table is received automatically at a predetermined time (col. 5, l. 6-10; col. 6, l. 36-40, 51-53; col. 7, l. 61-67; col. 8, l. 1-5, 50-56; & Figs. 4, 6);
- refining the prioritized content into demanded content based on the demand table (col. 5, l. 19-21); and

- broadcasting the demanded content to the client (col. 5, l. 22-28).

Further referring to claim **95**, Payton discloses that the server has a storage medium (col. 4, l. 55-58 & Fig. 2) and an integrated circuit 47 coupled via a bus including a multi-drop bus (the examiner notes that the scheduling processor and digital repository in the central distribution server are coupled via a multi-drop bus to the playback devices (col. 61-67; col. 10, l. 1-20; & Fig. 8), wherein the integrated circuit performs the above functions.

NOTE: The USPTO considers the applicant's "or" language to be anticipated by any reference containing either of the corresponding elements. The USPTO also considers the applicant's "one or more of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Referring to claims **81, 92, 96**, and **101**, Payton discloses the method/machine-readable medium/system/apparatus of claims 1, 91, 96, and 99, respectively, wherein the feedback received from the client is received in a batch (the examiner notes that by sending the subscriber profile data in response to a periodic trigger, the data is sent in a batch)(col. 7, l. 65-67 & col. 8, l. 1-4).

Referring to claim **90**, Payton discloses the method of claim 1, further comprising updating a descriptor table at the client in accordance with the first and second content descriptors (col. 3, l. 15-17; col. 6, l. 67; & col. 7, l. 1-3, 61-65).

Referring to claim **87**, Payton discloses the method of claim 1, wherein the content first and second content descriptors include metadata to describe one or more of the content, the prioritized content, and the demanded content (the examiner notes that data describing the

transmitted items is necessary and inherent to Payton, in order to allow a subscriber interface 58 to display the list of recommended items)(col. 6, l. 7-9, 26-29, 67 & col. 7, l. 1-3).

NOTE: The USPTO considers the applicant's "one or more of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **82, 93, 97, 102** are rejected under 35 U.S.C. 103(a) as being unpatentable over Payton.

Referring to claims **82, 93, 97, and 102**, Payton discloses the method/machine-readable medium/system/apparatus of claims 1, 91, 97, and 99, respectively. Payton further discloses that subscriber profiles are communicated between the central distribution server and the subscribers over a low bandwidth back channel (col. 3, l. 2-6 & col. 6, l. 51-58). Payton still further discloses that the local server 28 sends new subscriber profile data in response to a periodic trigger (col. 7, l. 65-67 & col. 8, l. 1-4). Payton does not disclose staggering sending of the feedback to the server by the client, wherein the staggering is based on a last time the client sent feedback to the server. Applicant's failure to adequately traverse the Examiner's taking of Official Notice (that it is well known within the prior art to stagger the sending of information

across a network to minimize network congestion) in the last Office Action is taken as an admission of the fact(s) noticed. It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Payton's method of periodically sending subscriber profile data across a low bandwidth back channel to include staggering the sending of information, such as that taught by the prior art in order to minimize network congestion.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL VAN HANDEL whose telephone number is (571)272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
Supervisory Patent Examiner, Art Unit
2623

MVH